

AVIATION

The Oldest American Aeronautical Magazine

DECEMBER 15, 1924

Issued Weekly

PRICE 10 CENTS



Verville-Sperry racer (500 hp. Curtiss D12A) in flight with retracted landing gear

VOLUME
XVII

SPECIAL FEATURES

NUMBER
24

ANALYSIS OF THE 1926 BUDGET
NEW AMERICAN AND FOREIGN AIRPLANES
ANNUAL REPORT OF THE CHIEF OF AIR SERVICE
C. G. GREY'S POST-IMPRESSIONS OF AMERICAN AVIATION

GARDNER PUBLISHING CO., Inc.
HIGHLAND, N. Y.
225 FOURTH AVENUE, NEW YORK

Entered as Second-Class Matter, Nov. 23, 1920, at the Post Office at Highland, N. Y.,
under Act of March 3, 1979.

The World's Flying Records

Airplanes

3 Kilometers—266.18 mph. Nov. 4, 1923, Lt. A. J. Williams, U.S.N., Curtiss-Vought Racer and Curtiss D12A Engine

Max. Duration—36 hrs. 4 min. 34 sec. April 16, 1917, Lt. O. G. Kelly and Lt. J. A. Macready, U.S.A.

100 Kilometers—249.81 mph. Oct. 6, 1923, Lt. A. J. Williams, U.S.N., Curtiss-Vought Racer and Curtiss D12A Engine

Altitude with Light Load—36,535 feet. October 30, 1923, by Sub. Lescaut, Imp-La-Maison, France

200 Kilometers Triangular Course—263.67 mph. October 6, 1923, Lt. A. J. Williams, U.S.N., Curtiss-Vought Racer and Curtiss D12A Engine

Seaplanes

200 Kilometers Triangular Course—177.29 mph. October 25, 1924, Lt. R. A. Olin, U.S.N., Curtiss-Vought Racer and Curtiss D12A Engine

Altitude with Light Load—28,462 feet. March 11, 1923, Sub. Lescaut, Molen, Sim-Or, France

100 Kilometers—176.92 mph. Oct. 25, 1924, Lt. R. A. Olin, U.S.N., Curtiss-Vought Racer and Curtiss D12A Engine

Max. Duration—30 hrs. 36 min. Oct. 18, 1924, Lieut. Ward and Proc. U.S.N., Curtiss C32 Seaplane

3 Kilometers—189.66 mph. Oct. 25, 1924, Lt. C. Caddy, U.S.N., Curtiss-Vought Racer and Curtiss D12A Engine

CURTIS AEROPLANE & MOTOR COMPANY, INC.

GARDEN CITY, N. Y.

ALBANY—BUFFALO, N. Y. & GARDEN CITY, N. Y.

DECEMBER 15, 1924

AVIATION

VOL. XVII, NO. 24

Published every Monday

CONTENTS

Editorial	1287	The Cotton-Park "Condenser" Training Plane	1402
Announcement of the 1925 Aviation Budget	1288	Four Motored Caproni Bomber	1403
Annual Report of the Chief of Air Service	1292	Regarding the Lark Monoplane	1405
The Air Mail and Grease	1294	Light Plane and Glider	1406
Editorial: Mad as a Hatter	1294	Went to a Light Plane	1406
Impressions of American Aviation	1295	Engine Lenses for Light Plane	1406
Training the Dayton Air Force	1297	French Air Estimates	1406
Air Service Method of Choosing Engines	1298	French Air Mission to Central America	1406
Recovery Apparatus for 223	1298	Aircraft and Airways	1407
Use of National Air Legislation	1299	United States Air Force	1409
Use of Commercial Aviation	1301	Blackfire	1412

GARDNER PUBLISHING COMPANY, Inc., Publishers

GENERAL AND EDITORIAL ROOMS: 325 FOURTH AVENUE, NEW YORK

PUBLICATION OFFICE

HIGHLAND, N. Y.

Subscription price: Four dollars per year, Single copies ten cents. Canada, five dollars. Foreign, six dollars a year. Copyright 1924, by The Gardner Publishing Company.

Issued every Monday. Forms close ten days previously. Entered as second-class matter Nov. 22, 1920, at the Post Office at Highland, N. Y., under act of March 3, 1879.

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AVIATION

VOL. XVII

DECEMBER 15, 1924

No. 24

THROUGH the entire history of aviation over a period of 20 years the Wright organization has maintained its high position.

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The Budget

THE most important Aviation Budget since the War has been sent to Congress by President Coolidge. Even the most optimistic hopes of the "air enthusiasts," seconded, could not have asked for better treatment. Forty-five million dollars, only seven the amount service development, is what the President is an conservative estimate of the amount available for the government Air Service.

The first statement of President Coolidge is, we can say without exaggeration to be taking under credit, the direct result of the restriction of governmental aircraft made by Congress. Last figure for last year was \$67,281,571.00, which exceeds the necessary with which it was presented, taking into account the increase this year.

Secretary of Labor, James J. Davis has given the figure as approximately seventy million dollars. The open statement of this cost will lead to comparisons with foreign conditions, and similar proposals that cannot help but be made. Therefore the public has been under the impression that only about thirty millions have been available for the Air Service, and the entire price has been led to blame Congress for our shortage of Service aircraft. When it is known that probably no more money has been spent since the War in doing these things, the natural question is now to be: Who haven't we more aircraft? The blame will then be placed where it belongs, not on the Secretary of Congress, but on those who have spent huge sums for almost anything else except aircraft.

The President has now to it that this condition shall not continue. He specifically states that over millions of dollars will be spent "with the industries" for new air equipment. This is half the sum directly appropriated for "Aviation" and a third of what the government spends in all ways for the Air Service. This proportion is generous and proper. It means now for those who want to see "America First" in the Air to see that if approved by Congress it is not only spent as the way the President intended it to be, but that it does not result to the Treasury as has happened in previous years.

The money allotted for experimental work, so-called, are almost as ineffective. It is to be hoped that these airships will give practice an opportunity to catch up with experiment and research. It has been aptly stated that aeronautical engineering is more ahead of aircraft practice in this country. The situation has seriously resulted in attempts to incorporate into production work all the innovations of the laboratory. If the millions of dollars that have been expended for changes and new parts into production, the country would at least have a considerable quantity of aircraft. By all means, let us advance aeronautical engineering, but this should not lead to a necessarily delaying specialty production because some practical improvement may become available six months later.

In this connection, the McCook Field moving project can well be postponed for another year so that the half million dollars that it is proposed to spend will not be spent fruitlessly. What is needed more than anything else in American aviation is a National Air Policy. Without such a program there will be no progress and degradation. With a clearly stated National Air Policy there will be an answer for starting and then abandonment projects. Dayton must be an ideal site for the Air Service Engineering Division, but with a pre-dominant opinion against this view certain at this time will be operative.

Another point worth noting is that while the Army appropriation has been constant for ten million dollars, the Air Service has actually received an increase. A third of the whole War's increase has gone to Naval Aviation. This is in line with the increasing importance of air power and with the resulting decrease in effectiveness of other arms.

The maintenance of a capable aircraft industry is an inseparable necessity. The Government is disposed to do its part. It now awaits for the state of the industry to meet the requirements of the Service in such a way that they can be truly called public service corporations.

West Coast Jealousies

THE local spite of some western coast states and cities has been nicely injured by the moving of the 2213 to Los Angeles by Secretary Walker. If we are to believe the following newspaper clipping:

"The City of Angels is more happy. It loves the Secretary and his choice of names. But other cities view the Secretary with distrust almost as much of themselves as the Secretary does of Los Angeles, are annoyed, to put it mildly."

"Finally, for our, think it is for more entitled to free advertising at the hands of the United States than Los Angeles, which gets enough through its climate and neighborhood (the weather), anyway."

"There are friends of civic pride in San Francisco and the weathering is reminiscent of the era of what San Franciscoans refer to as the fire, while Portland is in arms."

"The Secretary is just plain 'goodwill,' according to the Portland (Oregonian), which predicts that if the Government backed the Secretary a whole lot of Zeppelins he would exhaust the name of every Los Angeles suburb before he found out that Portland was too good to quit."

"The slightest case on in the dorsal future the U. S. Decalogue Hollywood asking over them along with the Wisconsin and the Los Angeles. And then there are the film stars whom the Secretary knows at least by name."

For our part we are not asking but commendable interest in the making of aircraft after sides. But everything that is done in aviation is criticized by someone and sometimes AVIATION finds itself joining the chorus.

Annual Report of the Chief of Air Service

General Patrick Expresses Grave Concern Over the "Unhealthy State of the Aircraft Industry"

Grave concern over the "unhealthy state of the aeronautical industry" is expressed by Maj. Gen. Marcus M. Patrick, Chief of Air Service in his annual report for the third year 1923-24, just made public.

"It is desirable and appropriate," says General Patrick, "to lay particular emphasis on the unhealthy state of the aeronautical industry in the United States. No war reserve is in existence and quantity production is the avowed aim of everyone, would be almost as difficult as in 1917. Due to the lack of any appreciable war material program, our airplanes are entirely dependent for their support upon the scanty appropriations provided annually by Congress. The dire deplorable situation is to be corrected, it must be in the first place through increased appropriations for the aeronautical service of the War, Navy and Post Office Departments, reported with authority for those in charge to aircraft makers for aircraft without resorting to expedient loans, and in the second place, through the enactment of legislation designed to secure the development and growth of aircraft in this country."

No Civil Aviation Deserving of the Name

"There is today in the United States no commercial aviation deserving of the name, and the aeronautical manufacturing industry is unprepared to meet the demand for quantity production on the order of an emergency. It is true that a few aircraft operators continue in business, but in rather a haphazard and unbusinesslike manner. It is also true that a limited number of operators have been able to survive the period of reduced activity since the war. Nevertheless, we give the airplane to the world, who lead in nearly all phases of research and development and who hold nearly every important record in the air, still far behind the commercial application of this new medium of transportation."

"The reasons for the unhealthy state of the industry are not difficult to discover. Government requirements for the Air, War and Post Office are short and insufficient to keep it alive and the demand for commercial or public purposes is practically non-existent. If our country is to assume its proper place in the world of aeroplanes and thereby secure the desired status of a potential and national defense, it must be through the creation of a commercial demand for aircraft."

"At the present time there are four causes which restrain the growth of the aircraft industry in this country. The first is a lack of confidence with the consequent loss of life and property; the second is the high initial cost and rapid depreciation of equipment; the third is the impossibility of obtaining satisfactory commerce rates; the fourth is the total lack of appropriate legislation designed to secure the licensing of pilots and aircraft, defining the legal status of operators in test flights and transport and providing for the establishment of landing fields and aids to air navigation."

Following are extracts from General Patrick's report dealing with the Air Service proper:

Present Personnel and Stations

On July 1, 1923, there were 816 officers commissioned in the Air Service and 21 detached from other arms, a total of 837 officers of one category, officers continued in the service undergoing general reclassification.

During the year a net increase of 33 officers brought this total up to 870 on June 30, 1924.

Within the continental limits of the United States there are:

- 1 General Service School
- 1 Environmental Station
- 1 Air Intermediate Depot
- 11 Active Flying Fields
- 7 Reserve Flying Fields

- 20 Auxiliary Flying Fields
- 2 Quarters and Bombing Ranges
- 2 Radio Sites
- 2 Properties awaiting disposal by sale (Transferred to Department of the Interior)
- 2 Properties turned over under revocable license to other departments of the Government.

By our under personnel:

In Panama: One Active Flying Field, one Auxiliary Flying Field, one Air Depot

In Hawaii: Two Active Flying Fields, one Air Depot, one Air Depot

In the Philippine Islands: Three Active Flying Fields, one Air Depot

Unfortunate Position of First Lieutenants

Attention is again invited by General Patrick to the unfortunate position which the great majority of the First Lieutenants of Air Service occupy on the single list. These officers were not given their commissions until they had to do their flying training. Due to the nature of this training the period was lengthy, being in some cases from a year to eighteen months. As a consequence these Air Service officers find themselves unjustly ranked by officers of the same grade but who are not experienced in other arms, who were given commissions upon the completion of three months' training.

"It is needless of course to enlarge upon such a situation," says General Patrick. "The only remedy is to have officers continue the service by resignation or early retirement, before it becomes acute, or it may be all right of course. Since it is clear that a remedy must be found to this, I wish to urge that it be found early when these officers are at the peak of their usefulness and are placing the Army first in service. Considering the situation absolutely, and so objectively, I cannot refrain from saying this report is the first report for a year in which the composition of so many undesirable state of affairs."

Solutions Proposed

"Three solutions suggest themselves. First—the most constructive recommendation service to all officers who are over-aged their control took more than three months to give these recommendations, with the object of placing them in the service facing an officer who entered after three months' training camp. This, however, would merely move the Air Service 'block' somewhat further on the list.

"Second—discontinue throughout the promotion list for Air Service officers in the grade of Captain and First Lieutenant who took more than three months to get commissions through no fault of their own, between the top Captains of the Air and retired from training camp (three months' training) and bottom Captains of the Army who entered from training camp, placing on Air Service officers who are not the determined by the rate of Air Service officers in the last number of officers recommended."

"Third—a service promotion list for Air Service officers with proper provision for promotion based upon length of service, giving due recognition to the rank and file as they are, and likewise with appropriate provision for advancement of these officers from the service by retirement and finally by their transfer to other branches when their usefulness to Air Service officers is impaired, although not to the degree which would prevent their rendering efficient service in other capacities."

Enlisted Personnel

The sub-branches of transport, training is a great variety of mechanical trades, offered the Air Service have proved as attractive to young men as any life and while, as in the past, there has been no great difficulty in securing recruits, the problem of retaining them in the service after their period

of apprenticeship continues to be a perplexing one. Many apply for discharge for mechanical and a small number are discharged to re-enlist after the expiration of their first enlistment period.

An important step toward the correction of this state of affairs is the enactment of legislation, authorizing a substantial increase in the number of enlisted grades and ratings. Many of the men who were previously demoted in 1923, together with others equally qualified for higher grades, will be appointed to these new positions with a resulting increase in the number of men who will be available to the service.

Other measures which have served to promote contentment and give efficiency among the enlisted personnel have been the increase of extra pay for commendations in the case of the pilot, the increase in the number of men who may be placed

in flying status and the provision of opportunities for particularly interesting and instructive work.

War Stocks are Exhausted

"The war-produced stock has now been exhausted. Many planes have been rebuilt since that time. A careful technical survey of the stock has been going on for eight months, of which the reports are now being tabulated, indicating that the determination in some cases of equipment in storage awaiting



A batch of Fokker D3F (450 hp. Napier Lion engine) pursuit planes, ordered by various governments, ready for shipment at the American factory of the Fokker company.

in flying status and the provision of opportunities for particularly interesting and instructive work.

Facilities for Enlisted Men

A class of 316 men, selected from Scott and Langley Fields, was sent to Lehigh, N. J., for training in connection with the opening of naval aviation. Four of this class were in the Naval Aviation class who broke away from her company, took and one of their number was officially awarded for his services rendered in that service. One such aviator, during the year for the display of skill and noble service on the part of enlisted men were the following: Sergeant of Cape Hatteras and the first of the Naval Flying. An originally selected, the personnel of this later enterprise included in its number three Staff Sergeants as well as. Just prior to the departure from Seattle, one of them was found to be physically unfit for such an extended and difficult undertaking and his place was taken by a Reserve Officer. Staff Sergeant Harvey was with Major Hanson as the sponsor of his later service and staff Sergeant Green, the only one remaining with the flight was now, as a result of his efficient service, was appointed a second lieutenant in the Air Service Officers' Reserve Corps and placed in active duty until the completion of the project.

Flying Cadets

At the opening of the 6-2nd year, the Air Service adopted a schedule for flying cadets involving two classes annually in airplane training and one class in balloons and airships. The last of these classes started in September and the first class of the new course started in September and was in March.

A total of 315 candidates was authorized to take the entrance exam for training in these courses during the year. Of this number 230 were found to be qualified and the known have reported for enrollment.

Attention is again invited by General Patrick to the lack of the most equipment to supply the existing organizations. "That war appropriations available for the present year are nearly exhausted," he says, "have been the result of the numerous requests for the authorized strength of the service. By flying war-produced planes and engines to the limit of

rebuilding, notably foreign built and training planes, in greater than was expected. In the absence of safety, whenever the damage justified it, these planes have been discarded, the unserviceable parts discarded, and those parts which can be safely and economically used again, turned into stock for repairing other planes."

"Commercial aviation has lagged in this country. Very few planes are built and sold commercially. Generally speaking, the aeronautical industry is practically the sole customer of an aircraft industry which is rapidly dwindling and which has now almost reached the vanishing point. Several inactive aircraft operations during the past year and others have had such sharp reductions in the amount of work with in recent years that their labor force has been extremely high, thus increasing the cost of manufacture and causing a severe loss of efficiency in the use of building equipment."

"It is hoped that larger appropriations for the purchase of new aircraft will be covered at the next session of Congress, not only in order to fill the actual requirements of existing units, but also to keep alive a number of factories to furnish a nucleus for the expansion to the one necessary for war production."

Source of Replacement

At the present time the Air Service has only two sources of replacement for Reserve Officers, i.e., the usual class of flying cadets each year, and graduates of R.O.C. units. There are only six of these units, the smallest representation of any branch—either enlisted or non-commissioned—and this in spite of the fact that an Air Service reserve officer must have had no knowledge of a high order and a great deal of actual training.

A thorough study indicates in General Patrick's opinion that in order to meet the above annual replacement of reserve officers, the following is required and is, therefore, strongly recommended:

- (a) That thirty-six Air Service R.O.C. Units be established with the least possible delay.
- (b) That each unit have a minimum complement of 250 men.
- (c) That every effort be made to retain at least 25 per cent of the enrollment of each unit in the second year advanced course.



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